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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,984

04/07/2006

Alessandro Aiello

09952.0032

7149

22852 7590 03/12/2008
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EXAMINER

BONZO, BRYCE P

ART UNIT

PAPER NUMBER

2113

MAIL DATE

DELIVERY MODE

03/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,984	Applicant(s) AIELLO, ALESSANDRO	
	Examiner /Bryce P. Bonzo/	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19,22,24,25,27,28,30,32,33,35 and 36 is/are rejected.
- 7) ☒ Claim(s) 21,23,29-31 and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/7/06</u> . | 6) <input type="checkbox"/> Other: _____ |

NON-FINAL OFFICIAL ACTION

Status of the Claims

Claims 1-18 were cancelled prior to examination.

Claims 19, 22, 24, 27, 28, 30, 32, 35 and 36 are rejected under 35 USC §102.

Claims 25 and 33 are rejected under 35 USC §103.

Claim 21 is objected for a minor formality.

Claims 20, 21, 23, 26, 29, 31 and 34 are objected to while containing allowable subject matter.

Minor Informalities

Claim 21 lacks proper antecedent basis for "in said set a faulty hardware function". It is believed Applicant is intending to claim where software on the general purpose device is substituted for faulty hardware on the special purpose device.

Claim Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 19, 22, 24, 27, 28, 30, 32, 35 and 36 rejected under 35 U.S.C. 102(e) as being anticipated by Klarer (United States Patent 7,117,390 B1).

19. (New) A method of providing fault protection of special purpose devices included in at least one communication network and performing respective functions comprising the steps of (column 4, lines 1-18):

providing a set of general purpose devices adapted to be configured to perform said respective functions (column 4, lines 18-25); and

in the presence of a function exposed to a faulty condition in any of said special purpose devices, applying at least one of said general purpose devices in performing said respective function exposed to said faulty condition (column 4, lines 18-25).

22. (New) The method of claim 19, comprising the step of transferring resources needed to perform said respective function exposed to a faulty condition to a general purpose device in said set (column 4, lines 18-27).

24. (New) The method of claim 19, comprising the step of arranging said set of general purpose devices in a distributed system (column 3, lines 30-42).

36. (New) A computer program product loadable in the memory of at least one computer and including software code portions capable of performing the steps of the method of any one of claims 19 to 26 (column 2, lines 53-57).

27. (New) A system for providing fault protection of special purpose devices included in at least one communication network and performing respective functions comprising a set of general purpose devices adapted to be configured to perform said respective functions in the presence of a function exposed to a faulty condition in any of said special purpose devices (column 4, lines 1-27).

28. (New) The system of claim 27, comprising fault handler modules for locating said faulty conditions in respective special purpose devices and issuing requests for a general purpose device in said set to be applied in performing said function exposed to said faulty condition (column 4, lines 1-27).

30. (New) The system of claim 27, comprising a communication facility adapted for transferring resources needed to perform said respective function exposed to a faulty condition to a general purpose device in said set (column 3, lines 30-42).

32. (New) The system of claim 27, wherein said set of general purpose devices are arranged in a distributed system (column 3, lines 30-42).

35. (New) A communication network having associated a fault protection system according to any one of claims 27 to 34 (column 3, lines 30-42).

Rejections 35 USC §103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klarer in view of Greenspan (United States Patent Application Publication No. 2004/0236987 A1).

As per claims 25 and 33, Klarer does not disclose, while Greenspan teaches:

33. (Representative of claim 25) The system of claim 27, comprising a distribution center storing code segments associated with said set of general purpose devices, said distribution center storing code segments adapted to be transferred to said general purpose devices in said set to configure them to perform said respective functions exposed to said faulty condition (¶¶44, 38, 31).

Klarer describes an embedded system with takeover processing. As the system is embedded, a simple local bus is sufficient to handle the system transmission requirements. Greenspan is specifically design to handle backup processing on the network scale for failed processes. Because Greenspan specifically addresses the distributed nature of the back processing, a distribution center with the specifications for the virtualized devices is required. This allows the recovery system to begin processing

without having to store every possible configuration themselves. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to implement the distribution system of Greenspan into the recovery system Klarer, thus allowing a more robust transport of data during a recovery operation.

Allowable Subject Matter

Claims 20, 21, 23, 26, 29, 31 and 34 are objected to while containing allowable subject matter. Applicant is reminded any change in scope will nullify this indication of allowable matter. The features outlined below particularly overcome the prior art rejections.

20. (New) The method of claim 19, comprising the steps of:

including in *said special purpose devices a fault handler module;*

locating said faulty condition in the respective special purpose device by means of said fault handler module; and

issuing a request for a general purpose device in said set to be applied in performing said function exposed to said faulty condition.

21 and 29. ...comprising the step of substituting by means of *a software function performed by a general purpose device* in said set *a faulty hardware function performed in one of said special purpose devices.*

23 and 31. ...configuring said general purpose devices in said set for resource sharing; and

transferring resources needed to perform said respective function exposed to a faulty condition to a general purpose device in said *set from another general purpose device in said set*.

26 and 34.*configuring said distribution center for receiving from said special purpose devices requests indicative of a faulty condition in said special purpose devices; and*

upon receiving any said request, *sending from said distribution center a set of code segments for performing a respective function exposed to said faulty condition to at least one general purpose device* in said set thereby configuring said general purpose device to substitute the special purpose device exposed to said faulty condition in performing said respective functions.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Bryce P. Bonzo/ whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bryce P Bonzo/
Primary Examiner
Art Unit 2113